

Pain Among Injection Drug Users with HIV/AIDS in Vietnam

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Background

- Little is known about pain among HIV/AIDS patients or injection drug users (IDU) in developing countries.
- There is evidence that chronic opioid users are at greater risk for pain than non-users of opioids.
- In Vietnam, 60% of HIV-infected people are IDUs.
- To plan optimal pain relief and palliative care programs for HIV/AIDS patients in Vietnam and other resource-limited settings with high rates of IDU, it is necessary to understand the prevalence and impact of pain and risk factors for pain among IDUs with HIV/AIDS.

Objectives

To measure the prevalence and impact of pain and to determine risk factors for pain among hospitalized IDUs with HIV/AIDS in Haiphong, Vietnam.

Methods

In calendar year 2007, data were collected from all IDUs upon admission to the HIV Service of Haiphong General Hospital. The survey instrument consisted of the Brief Pain Inventory (BPI)* supplemented with questions on socio-demographics, illicit drug use, performance status, and HIV-related disease. Factors associated with having moderate or severe pain were sought.

*Cleeland et al. J Pain Symptom Manage 1988;3:23.

Results

- 354 adult patients met inclusion criteria, 100% participated.

| Selected Demographics | Percent |
|------------------------------------|----------------|
| Gender: Male | 94% |
| Age: 18 – 29 | 40% |
| 30 – 39 | 51% |
| > 40 | 9% |
| Marital status: Married | 43% |
| Single | 48% |
| Separated, divorced, widowed | 9% |
| Education: Middle school or less | 75% |
| High school or higher | 25% |
| Employment: Unstable or unemployed | 82% |
| Stable | 18% |
| Religion: Buddhist | 99% |

Results

| Health & Drug Use Characteristics | Percent |
|--|----------------|
| CD4 Count: < 50 | 65% |
| 50 – 200 | 27% |
| > 200 | 8% |
| Performance Status: Normal | 35% |
| Unable to work, able to do self-care | 60% |
| No self-care | 5% |
| Taking antiretroviral (ARV) therapy | 19% |
| Injected drug: heroin | 100% |
| Most recent heroin use: Within 3 months | 40% |
| Not within past 3 months | 60% |

Results

Of 354 subjects, 318 (90%) reported pain in past 24 hours.

| Pain level in patients with pain | Worst pain in past day | Average pain in past day |
|---|-------------------------------|---------------------------------|
| Mild | 10% | 27% |
| Moderate - Severe | 90% | 73% |

Impact of pain on aspects of patient's life

| Aspect of patient's life | Degree of interference | |
|--------------------------|------------------------|-------------------|
| | None - Mild | Moderate - Severe |
| Activity | 25% | 75% |
| Walking | 26% | 74% |
| Work | 7% | 93% |
| Relationships | 45% | 55% |
| Mood | 45% | 55% |
| Sleep | 20% | 80% |
| Enjoyment of life | 34% | 66% |

Factors associated with severe pain in past 24 hours

- In univariate analysis, the only factor significantly associated with severe pain was heroin use within the past day.
- In multivariate analysis of 'most recent heroin use' (from univariate analysis) and factors associated in other studies with pain in PLWHA (gender, CD4 count, WHO stage of HIV disease, taking ARV therapy), only heroin use within the past day was significantly associated with severe pain (OR 2.02, 95% CI 1.18 – 3.49).

CONCLUSIONS

- Moderate and severe pain is very prevalent among hospitalized IDU with HIV/AIDS in Vietnam.
- Pain adversely and severely impacts quality of life and ability to perform activities of daily living in this population.
- Recent heroin use is associated with severe pain.
- Possible explanations for this association are self-medication with heroin to relieve pain and opioid-induced hyperalgesia.

CONCLUSIONS

- Initiatives to improve assessment and treatment of pain among IDU with HIV/AIDS, a vulnerable population, are much needed.
- Assessment and treatment of pain in this population and among patients receiving methadone substitution therapy should take into account the possibility of opioid-induced hyperalgesia.
- More research is needed to determine optimal pain relief methods in patients with severe pain and either opioid dependence or opioid-induced hyperalgesia as well as to measure the prevalence and impact of pain among other populations of PLWHA in developing countries.